Appl. No. 10/533,180

Amdt. Dated February 5, 2010

Reply to Office Action mailed January 11, 2010

AMENDMENTS TO THE CLAIMS:

Please replace the prior listing of claims in the application with the following listing of claims:

- (Currently amended) A method for growing and processing a legume fodder crop and a sugar cane crop, including the steps of:
 - (a) providing a cane sugar mill;
 - (b) providing a feed mill, said feed mill being located at or adjacent to said cane sugar mill;
 - (c) growing said legume fodder crop as a soil enhancing fallow crop for said sugar cane crop to be processed at said cane sugar mill:
 - (d) delivering freshly harvested legume fodder crop to said feed mill located at or adjacent to said cane sugar mill;
- (e) processing the legume fodder crop to seek optimised cell breakage or fiberisation in the resultant shredded material; and
- (f) drying the shredded material using heat supplied by the cane sugar mill or from by-products of the cane sugar mill to produce a dried animal feed material, suitable said animal feed material being dry enough for long term storage.
- 2. (Currently amended) [[A]] The method as claimed in claim 1, including the further step:
- (g) mixing the dried material with suitable liquid binder(s) to produce a feed meal material of suitable desired moisture content as required for use.
- (Currently amended) [[A]] The method as claimed in claim 1, wherein:
 in step (d), the freshly harvested legume fodder crop is delivered to the feed
 mill in bulk using a transport system/infrastructure used to transport said sugar cane crop in
 bulk of to the cane sugar mill.
- (Currently amended) [[A]] The method as claimed in claim 1, wherein:
 in step (e), the harvested crop is shredded using heavy duty shredder/hammermill machines.

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- (Currently amended) [[A]] The method as claimed in claim 1, wherein: in step (e), juice from said legume fodder crop is extracted, concentrated, and stored in liquid concentrate tank(s).
- (Currently amended) [[A]] The method as claimed in claim 1, wherein:
 in step (f), the shredded matter is dried using hot flue gas from the sugar mill boiler, or from a separate furnace fired with sugar cane bagasse either fresh from the cane sugar mill or from a stockoile.
- (Currently amended) [[A]] <u>The</u> method as claimed in claim 6, wherein:
 the dried shredded material is separated into coarse (stem) and fine (leaf) dry
 fibre fractions, which are optionally selectively recombined during later processing.
- (Currently amended) [[A]] The method as claimed in claim 2, wherein:
 in step (g), the liquid binder(s) include molasses, juice concentrate and or
 other suitable-liquids to achieve the desired moisture content.
- (Currently amended) [[A]] The method as claimed in claim 2, wherein:
 during, or after, step (g) other ingredients and additives, including vitamins, minerals, digestion improvers, antibiotics and other pharmaceuticals are added to increase the value of the feed meal material.
- 10. (Currently amended) [[A]] The method as claimed in claim 2, wherein: after step (g), the feed meal material undergoes further processing including pelletising, crumbling, granulation, agglomeration, pressure compaction, cubing, extrusion, moulding, tableting, briquetting, baling or bagging to suit the market requirements.
- 11. (Currently amended) A method for growing and processing a legume fodder crop and a sugar cane crop, including the steps of:
 - (a) providing a cane sugar mill;
 - (b) providing a feed mill, said feed mill being located at or adjacent to said cane sugar mill;

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- (c) growing said legume fodder crop as a soil enhancing fallow erop for said sugar cane crop to be processed at said cane sugar mill;
- (d) delivering freshly harvested legume fodder crop to said feed mill located at or adjacent to said cane sugar mill;
- (e) processing the legume fodder crop to produce cut or shredded material; and
- (f) drying the cut or shredded material using heat supplied by the cane sugar mill or from by-products of the cane sugar mill to produce a dried animal feed material, suitable being dry enough for long term storage.
- (Currently amended) [[A]] <u>The</u> method as claimed in claim 11, including the further step:
 - (g) baling the dried cut and/or shredded material (or hay).
- (Currently amended) [[A]] The method as claimed in claim 11, wherein:
 in step (e), the crop is processed using rotary knives to cut and/or shred the
 fibrous material.
- (Currently amended) [[A]] The method as claimed in claim 12, wherein:
 after step (g), the baled material (or hay) is outloaded or containerised for
 transport.
- 15. (Currently amended) [[A]] The method as claimed in claim 12, wherein: at step (g), molasses is mixed with the dried material (or hay) to increase the nutritional value thereof.
- 16. (Previously presented) A method for growing and processing a legume fodder crop and a sugar cane crop to produce an animal feed product, including the steps of:
- growing said legume fodder crop as a soil-enhancing fallow crop for said sugar cane crop;
 - (ii) harvesting the legume fodder crop;
 - (iii) providing a cane sugar mill;

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- (iv) providing a feed mill, said feed mill being located at or adjacent to said sugar mill;
- $\hbox{(v)} \quad \hbox{delivering freshly harvested legume fodder crop to said feed mill located at or adjacent to said cane sugar mill;}$
- (vi) processing the legume fodder crop to seek optimised cell breakage or fiberisation in the resultant shredded material; ; and
- (vii) drying the shredded material using heat supplied by the cane sugar mill or from by-products of the cane sugar mill to produce an animal feed material.
- (Currently amended) [[A]] <u>The</u> method as claimed in claim 16, including the further step:
- (viii) mixing the dried material with suitable liquid binder(s) to produce a feed meal material of suitable desired moisture content if required for use.
- (Previously presented) A method for growing and processing a legume fodder crop and a sugar cane crop to produce an animal feed product, including the steps of:
- growing said legume fodder crop as a soil-enhancing fallow crop for said sugar cane crop;
 - (ii) harvesting the legume fodder crop;
 - (iii) providing a cane sugar mill;
 - (iv) providing a feed mill, said feed mill being located at or adjacent to said cane sugar mill;
 - (v) delivering freshly harvested legume fodder crop to said feed mill located at or adjacent said cane sugar mill;
- (vi) processing the legume fodder crop to produce cut or shredded material;and
- (vii) drying the cut or shredded material using heat supplied by the cane sugar mill or from by-products of the cane sugar mill to produce an animal feed material.
- (Currently amended) [[A]] <u>The</u> method as claimed in claim 18, including the further step:
 - (viii) baling the dried cut and/or shredded material (or hay).

- 20. (Currently amended) [[A]] <u>The</u> method for producing an animal feed product including the steps of:
- growing a legume fodder crop (as hereinbefore defined) as a soilenhancing fallow crop for sugar cane;
 - (ii) harvesting the crop; and
 - (iii) processing the crop by the method claimed in Claim 1.
- 21. (Currently amended) [[A]] <u>The</u> method for producing an animal feed product including the steps of:
- growing a legume fodder crop (as hereinbefore defined) as a soilenhancing fallow crop for sugar cane;
 - (ii) harvesting the crop; and
 - (iii) processing the crop by the method claimed in Claim 11.